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AMENDMENT

Kindly amend the application as follows:

IN THE SPECIFICATION:

Please amend page 3, line 23, to page 4, line 2, to read as follows:

In a preferred embodiment the nucleic acid is selected from the group consisting of DNA, RNA, PNA (peptidic-NA), CNA (aminocyclohexylethane acid-NA), HNA (hexitol nucleic acids), p-RNA (pyranosyl-RNA), oligonucleotides, oligonucleotides of DNA, oligonucleotides of RNA, primers, A-DNA, B-DNA, Z-DNA, polynucleotides of DNA, polynucleotides of RNA, T-junctions of nucleic acids, domains of non-nucleic acid polymer-nucleic acid blockpolymers and combinations thereof. Suited non-nucleic acid polymers for blockcopolymers can be polypeptides, polysaccharides such as cellulose, or artificial polymers, such as polyethylene glycol, and are generally known to the person skilled in the art.

B1

Please amend page 4, line 20, to page 5, line 8, to read as follows:

The immobilization of the nucleic acid to the substrate can be adjusted by changing the intensity and duration of the plasma treatment. For example, using short time/low pressure conditions (p_{O2}=0.4 mbar, t=4 min) leads to a weak binding of DNA molecules to the surface, whilst using long-time/high-pressure conditions (p_{O2}=0.8 mbar, t=8 min) leads to a high density and strong binding of DNA molecules to the surface. These parameters correspond to a high-voltage power of 33 Watts at a frequency of 50 Hz. In the hands of the inventors these parameters lead to optimal results in terms of the cost to benefit-ratio. The pressures and times given here are meant as non-limiting examples of the invention. In fact, higher power levels can be used to reduce the minimum process time required to observe a significant binding effect. The

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B2 Cont.

individual protocols will vary depending on the machinery and the setup used for the immobilization process but can easily be determined by the person skilled in the art employing the general concept of the invention.

Please amend page 5, line 27, to page 6, line 8, to read as follows:

B3

The nucleic acid herein referred to also as nucleic acid molecule may be either DNA or RNA. This interchangeability, which applies to many cases, resides in physiochemical similarities between DNA and RNA. Of course, any nucleic acids or derivatives thereof can also be used in the present invention such as, but not limited to, oligonucleotides of DNA and RNA, respectively, primers thereof and polynucleotides of each of said two nucleic acid species. Additionally, nucleic acids which can be used in the present invention may show various confirmations such as A-DNA, B-DNA and Z-DNA which differ mostly in the diameter and the particular kind of helix structure. Also domains of nucleic acids within larger units may be used. It is to be understood that any of the aforementioned nucleic acid species may be either in a double-stranded or single stranded form.

Please amend page 10, lines 4-7, to read as follows:

B4

The fact that in figure 7 more DNA molecules per unit are found than in figure 6 and that in figure 7 the DNA molecules are less stretched, but more attached in a zig-zag-like shape supports the idea that the regime "2" leads to a higher binding energy, thus to a more effective immobilization of DNA.